



FIGURE 1

SEQ ID NO:51 GAC GGA ATT AAT TTC GCA ACA GGG AAT TTA CCT GGT TGC TCT TTC TCT ATC TTC CTT CTG
SEQ ID NO:52 D G I N F A T G N L P G C S F S I F L L

SEQ ID NO:51 GCT TTG TTC TCA TGC TTG CTT ACA CCC ACA GCC GGG CTG GAG TAC CGT AAT GCC TCC GGA
SEQ ID NO:52 A L F S C L L T P T A G L E Y R N A S G
SEQ ID NO:138 (page 5)

SEQ ID NO:51 CTC TAC ATG GTA ACT AAC GAC TGC AGT AAC GGT AGT ATC GTG TAT GAG GCC GGG GAT ATT
SEQ ID NO:52 L Y M V T N D C S N G S I V Y E A G D I
SEQ ID NO:138 (page 6)

SEQ ID NO:51 ATC CTC CAC TTA CCT GGC TGT GTC CCC TGC GTA CGC TCT GGC AAT ACA TCA AGA TGC TGG
SEQ ID NO:52 I L H L P G C V P C V R S G N T S R C W
SEQ ID NO:155 (page 6)

SEQ ID NO:51 ATC CCT GTG AGC CCY ACC GTC GCC GTG AAG TCG CCC TGC GCC ACC GCC TCT CTC CGC
SEQ ID NO:52 I P V S P T V A G A wobble, no effect on translation
SEQ ID NO:174 (page 7)

SEQ ID NO:51 ACG CAC GTG GAT ATG GTG GGR G A wobble, no effect on translation
SEQ ID NO:52 T H V D M M V G A A wobble, no effect on translation
SEQ ID NO:174 (page 7)

SEQ ID NO:51 CTT TGT GGA GCG CTA TTT CTT GTY T C wobble, no effect on translation
SEQ ID NO:52 L C G A L F L V V C wobble, no effect on translation
SEQ ID NO:190 (page 7)

SEQ ID NO:51 ACT GTC CAG GAC TGC AAC TGT TCC ATC
SEQ ID NO:52 T V Q D C N C S I

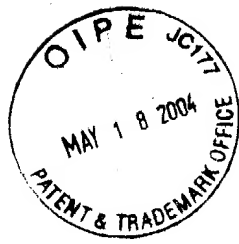


Figure 2 (page 1 of 2)
E1 nucleic acid

51	GACGGAATTA	ATTTGCAAC	AGGGAATTA	CCTGGTTGCT	CTTTCTCTAT	CTTCTCTCTG
51	GCTTTGTTCT	CATGCTTGCT	TACACCCACA	GCCGGGCTGG	AGTACCGTAA	TGCCTCCGGA
HOTTA '046	CTCT	CATGCTTGCT	TACACCCACA	GCCGGGCTGG	AGTA TCGTAA	TGCCTCCGGA
51	CTCTACATGG	TAACTAACGA	CTGCAGTAAC	GGTAGTATCG	TGTATGAGGC	CGGGGATATT
51	CTCTACAT AG	TAACTAACGA	CTGCAGTAAC	AGC AGTATCG	TGTATGAGGC	CC AGG ATATT
51	ATCCTCCACT	TACCTGGCTG	TGTCCCCTGC	GTACGCTCTG	GCAATACATC	AAGATGCTGG
51	ATCCTCCACA A	T GC CTGGCTG	TGA AC CCCTGC	GTACGCTCTG	GCA AC ACATC	AAG CT GCTGG
51	ATCCCTGTGA	GCCYACCGT	CGCCGTGAAG	TCGCCCTGCG	CCGCCACCGC	CTCTCTCCGC
51	AC CCCTGT AA	GC TC CTAC TGT	CGCTGTGGGT	CGCGCTGGCG	CTGCT ACCGC	CTCTCTCCGC
51	ACGCACGTGG	ATATGATGGT	GGRGCGGGCC	ACCCATATGCT	CAGCTCTCTA	CGTAGGAGAC
51	ACA CA T GTGG	ATATGATGGT	GGG AG CGGGCC	ACCC T TTGCT	CAGCTCTCTA	CGTAGGAG AT
51	CTTTGTGGAG	CGCTATTCTTCT	TGTYGGGCAG	GGGTTCTCAT	GGAGACATCG	CCAGCATTGG
51	CTTTGTGGAG	CGCT TTT TCT	TGTTGGGCAG	GGGTTCTCAT	GGAGACATCG	CCAGCATTGG
51	ACTGTCCAGG	ACTGCAACTG	TTCCATC			
51	ACTGTCCAGG	AT TGCAACTG	TTCC G ATCTAC	CCTGGGCACC	TAACAGGCCA	TCGTATG

Figure 2 (page 2 of 2)
E1 protein

52	DGINFATGNL	PGCSFSIFLL	ALFSCLLTPT	AGLEYRNASG	LYMVTNDCSN	GSIVYEAGDI
Hotta '046			LSCLLLTPT	AGLEYRNASG	LYTNTNDCSN	SSIVYEAQDI
52	ILHLPGCVP	VRSGNTSRCW	IPVSPTVAVK	SPCAATASLR	THVDMMVGAA	TLCsALYVGD
Hotta '046	ILHMPGCPC	VRSGNTSRCW	TPVSPTVAVG	RAGAAATASLR	THVDMMVGAA	TLCsALYVGD
52	LCGALFLVGQ	GFSWRHRQHW	TVQDCNC	SIY		
Hotta '046	LCGALFLVGQ	GFSWRHRQHW	TVQDCNC	SIY	PGHLTGHRM	

